

REMARKS

Claims 1 through 9 and 11 through 39 are pending in the application. Claims 1, 9, 17, 25, 30 and 36 are the independent claims. Claims 1, 9, 11 through 25 and 30 have been amended. Claim 10 has been canceled without prejudice or disclaimer of the subject matter contained therein. New claims 31 through 35 have been added to depend from independent claim 30 and new independent claim 36 and claims 37 through 39, which depend from claim 36, have also been added.

Claims 9 through 16 are rejected under 35 U.S.C. § 101 for failing to disclose statutory subject matter. Claims 1, 2, 25 through 27, and 30 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,778,422 to Genduso et al.. Claims 17 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,778,422 to Genduso et al. Claims 3 through 5, 19 through 21, 28, and 29 are rejected under 35 U.S.C. § 102(b) as being anticipated by Genduso et al. (U.S. Patent No. 5,778,422) and to Csoppenszky (U.S. Patent No. 5,802,422). Claims 6, 7, 22 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Genduso et al., Csoppenszky, and U.S. Patent No. 6,314,561 to Funk et al. Applicant respectfully requests that the above-identified application be reconsidered in view of the following amendments and remarks.

New Claims

New claims 31 through 35 have been added to depend from claim 30 and contain similar recitations as claims 3 through 7.

New claims 36 through 39 have been added directed to a processor that recites similar elements as in claims 1 through 5, 9 and 11 through 13. New claims 36 through 39 are supported by claims 1 through 5, 9 and 11 through 13 and specification page 4, line 11 through page 5, line 2.

35 U.S.C. §101 Rejection

Claims 9 through 16 are rejected under 35 U.S.C. 101 for failing to disclose statutory subject matter. Claims 9 and 11 through 16 have been amended to overcome

the rejection and claim 10 has been canceled without prejudice or disclaimer of the subject matter contained therein. Therefore, Applicants respectfully request withdrawal of the rejection of claims 9 and 11 through 16.

35 U.S.C. § 102 Rejection

Claims 1, 2, 25 through 27, and 30 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,778,422 to Genduso et al. Applicant respectfully traverses this rejection.

Claim 1 has been amended to recite *inter alia*: "...providing an instruction to access valid data in a cache and to indicate that a line storing the valid data in the cache is a candidate for replacement by reducing an importance level of the line after the valid data is accessed while maintaining the line as a valid line." (Emphasis added).

The Examiner states:

Genduso et al. teaches a caching system with a memory controller for processing read and write cache operations. Write-Allocate/Read-Invalidate (WA/RI) **cache** (48) responds to a read request by determining whether the requested data is found within the cache. If the data is found, the read invalidate operation/**instruction** occurs.

Genduso et al. teaches that once the full requested cache line is sent to the CPU, memory controller (20) (**cache control logic**) writes-back the requested WA/RI cache line to main memory and invalidates the requested cache line in the WA/RI cache (col. 8, line 67 – col. 9, line 17; Figs. 2 & 6). Thus, a cache line is invalidated (which necessitates that a **valid cache line was accessed within the cache memory**) and becomes available for replacement as having a **reduced importance level** when compared to that of a valid cache line. The invalidation of the cache line corresponds to the **reducing of the importance level** of the cache line as claimed, which occurs **after the valid data has been accessed**. (Bolding in original.)

However, contrary to the Examiner's assertion, the caching system of Genduso et al. does NOT "provide an instruction to access valid data in a cache and to indicate that a line storing the valid data in the cache is a candidate for replacement by reducing an importance level of the line after the valid data is accessed while maintaining the line as a valid line," as recited in claim 1. (Emphasis added). In fact, the Genduso et al. system actually invalidates the cache line after the entire line has been sent to the CPU, which is

totally opposite to claim 1, since the claimed instruction does not invalidate the valid data either before or after accessing the valid data. Instead, the claimed instruction “reduce[s] the importance level of the line after the valid data is accessed while maintaining the line as a valid line.” As a result, the replacement policy in the cache can select the valid cache line for replacement based on the reduced importance level of the valid cache line.

Accordingly, Applicant believes the rejection to be overcome, and withdrawal of the Section 102 rejection of independent claim 1, along with independent claims 9, 25 and 30, which have been amended to recite similar elements to claim 1, and the claims that depend, respectively, therefrom, is respectfully requested.

Therefore, Applicant believes claims 1, 2, 5, 25 through 27 and 30 through 39 are allowable and accordingly, issuance of a notice of allowance to that effect is respectfully requested.

The 35 U.S.C. § 103 Rejection

Claims 17 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,778,422 to Genduso et al. Claims 3 through 5, 19 through 21, 28, and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Genduso et al. (U.S. Patent No. 5,778,422) in view of Csoppenszky (U.S. Patent No. 5,802,568). Claims 6, 7, 22 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Genduso et al. in view of Csoppenszky and further in view of U.S. Patent No. 6,314,561 to Funk et al. Applicant respectfully traverses these rejections.

Regarding independent claim 17, which is a computer-readable medium claim of claim 1, for at least those reasons given above for claim 1, the Csoppenszky and Funk combination fails to teach or suggest: “providing an instruction to access valid data in a cache and to indicate that a line storing the valid data in the cache is a candidate for replacement by reducing an importance level of the line after the valid data is accessed while maintaining the line as a valid line.” Therefore, the Examiner has failed to establish a *prima facie* case of obviousness, and withdrawal of the Section 103 rejection of claim 17 and claim 18 that depends therefrom is respectfully requested.

Regarding claims 3 through 7, 11 through 15, 19 through 23, 28 and 29, for at least those reasons given above for claim 1, the Examiner has failed to establish a *prima facie* case of obviousness. Therefore, withdrawal of the Section 103 rejection of claims 3 through 7, 11 through 15, 19 through 23, 28 and 29 is respectfully requested.

Accordingly, issuance of a notice of allowance for claims 3 through 7, 11 through 14, 15, 17 through 23, 28 and 29 is respectfully requested.

In view of the remarks submitted above, the Applicant respectfully submits that the present case is in condition for allowance and respectfully requests the Examiner issue a notice of allowance for all currently pending claims.

CONCLUSION

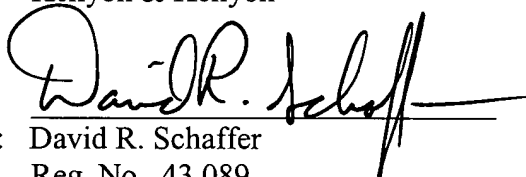
In view of the above amendments and remarks, the Applicant respectfully submits that the present case is in condition for allowance and respectfully requests that the Examiner issue a notice of allowance for all currently pending claims.

The Office is hereby authorized to charge any fees determined to be necessary under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayment to Kenyon & Kenyon **Deposit Account No. 11-0600**.

The Examiner is invited to contact the undersigned at (202) 220-4263 to discuss any matter concerning this application.

Respectfully submitted,

Kenyon & Kenyon

A handwritten signature in black ink, appearing to read "David R. Schaffer", is written over a horizontal line.

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